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Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, AZ 85007

RE: Arizona Public Service Company (APS or Company)
2020 Renewable Energy Standard Implementation Plan
Docket No. E-01345A-19-0148

Pursuant to Decision No. 78165 (July 28, 2021), Attachment A, APS was ordered to report on the pending Distributed Demand-Side Resource (DDSR) Aggregation Tariff and associated All-DDSR request for proposals (RFP) as follows:

APS shall file a progress report in the docket by October 15, 2021, stating general information regarding the outcome of the all-DDSR RFP, including but not limited to the number of bidders, the number of bids, the types of DDSRs, the capacity amounts, etc.

The progress report attached to this letter provides an update on the all-DDSR RFP and other activities related to development of the DDSR Aggregation Tariff. Please note that the RFP remains in progress; APS is currently reviewing submitted bids and will compile a short list of qualifying projects for further evaluation by October 26, 2021. To maintain the integrity of the RFP process, the progress report includes only a general overview of the bids received for the three DDSR products sought by the Company.

APS plans to make a final selection of qualifying proposals by November 30, 2021 and execute contracts with chosen respondents by March 1, 2022.

Please let me know if you have any questions.

Sincerely,

/s/ Todd Komaromy

Todd Komaromy

TK/bg
Attachment



**Arizona Public Service
Company**

**Distributed Demand-Side
Resource (DDSR)
Aggregation Tariff**

Progress Report

October 15, 2021

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Introduction

This report provides information on Arizona Public Service Company's (APS or Company) progress toward developing a Distributed Demand-Side Resource (DDSR) Aggregation Tariff. APS submits this report pursuant to Decision Nos. 77762, 77855, and 78165, which require APS to file a DDSR Aggregation Tariff to encourage the aggregation of DDSRs. APS submits this progress report in accordance with Decision No. 78165 to provide an update on work performed to date and next steps.

Decision No. 77762 ordered APS to file a tariff permitting the aggregation of distributed energy storage systems. Decision No. 77855 set a date of April 1, 2021 to file a tariff and specified that the tariff should permit the aggregation of DDSRs and provide compensation for the value of various operating characteristics including, but not limited to, capacity, demand reduction, load shifting, locational value, voltage support, ancillary and grid services, and any other operating characteristic to be considered. The decision further ordered that stakeholders be given the reasonable opportunity to review and comment on the tariff's values and applicable technologies.

Subsequently, Decision No. 78165 updated the date of the DDSR tariff filing to May 1, 2022 and provided direction for completing an RFP process initiated by APS to procure bids for DDSR aggregation to serve grid needs. Decision No. 78165 also ordered APS to continue to hold regular stakeholder meetings and file progress reports throughout the process.

To date, APS has held eight stakeholder meetings for the DDSR Aggregation Tariff and all-DDSR RFP:

- December 16, 2020
- February 19, 2021
- March 8, 2021
- March 29, 2021
- May 10, 2021
- May 28, 2021
- June 11, 2021
- June 23, 2021

The Company has also conducted multiple informal meetings with stakeholders to gather input in developing the tariff. APS also engaged Energy and Environmental Economics (E3) and Guidehouse to support APS in designing the tariff and performing the valuation analysis.

All-DDSR Aggregation RFP

Between April and June 2021, APS worked to develop a Request for Proposals (RFP) to procure bids for third-party aggregation of DDSR to provide multiple grid services through three proposed products:

- **Product A** – Provide systemwide peak capacity during the summer control season of June-September.
- **Product B** – Provide locational peak capacity during summer months and load shifting to help support low load conditions during non-summer months on six distribution feeders in metro Phoenix.
- **Product C** – Provide ancillary grid services such as voltage and frequency support.

Figure 1. All-DDSR RFP Products and Bids Overview

	Product A	Product B	Product C
Product Focus	System capacity, energy and load shifting value	Locational value on 6 APS feeders	Ancillary services
Requested Capacity Range	5-40 MW aggregated load	1-5 MW aggregated load	1-5 MW system support
Bids Submitted	6	4	2
Capacity Range Among Bids	5-40 MW	1-2.8 MW	5-15 MW

APS engaged with stakeholders throughout this process and provided opportunities for stakeholder review and input prior to issuing the RFP. APS filed copies of the draft RFP and responses to stakeholder questions in the ACC docket for this proceeding. The RFP was issued on June 30, 2021 and a copy of the final RFP was also filed in the docket.

During the RFP process, APS engaged with Merrimack Energy Group as an Independent Monitor (IM). The RFP was conducted within the Power Advocate platform, which provided equal access to all RFP documents and correspondence to all potential bidders. On June 22, 2021, APS issued responses to questions from stakeholders and potential bidders in advance of the RFP. At the request of interested parties, the original deadline of July 21, 2021 for interested bidders to submit Confidentiality Agreements was extended to July 29, 2021. This extension was approved in consultation with the Independent Monitor and communicated to all parties. On July 30, 2021, APS held a pre-RFP conference for interested stakeholders and potential bidders.

The deadline for RFP submissions was September 7, 2021, and APS received responses from a total of six bidders. From these six respondents, a total of 12 bids were received, including:

- Product A = 6 bids
- Product B = 4 bids
- Product C = 2 bids

Bids ranged in capacity from a high of 40 MW to a low of 1 MW of system capacity, and most bidders offered proposals for more than one product.

Proposals encompass a wide range of DDSR technologies, including residential and commercial energy storage (batteries), residential thermostats, managed EV charging and commercial demand response.

Respondents offered a range of proposals for how much capacity they could bring and how they would ramp up their capacity by June 1, 2024, with some respondents being able to provide capacity starting as soon as June 1, 2022.

APS is currently evaluating proposals and plans to choose a short list of finalists by October 26, 2021. Preliminary selection of projects to be awarded will be completed by November 30, 2021.

Figure 2. All-DDSR RFP Timeline

Activity	RFP Deadline Date
PowerAdvocate Registration Open	June 30, 2021
RFP Issued	June 30, 2021
Confidentiality Agreement Submittal DUE	July 29, 2021* 3:00 p.m. Arizona Time
Respondent Proposal and RFP Proposal Fee DUE	September 7, 2021 5:00 p.m. Arizona Time
Shortlisted Respondents Notified	October 26, 2021
Final Selections	November 30, 2021
Contract Executions	March 1, 2022

* Original deadline was July 21, 2021; deadline extended at request of interested parties. Extension approved in consultation with Independent Monitor and communicated to all parties.

APS Residential Energy Storage Pilot

- The APS Residential Energy Storage Pilot was approved in Decision Nos. 77762 and 78164 (July 28, 2021) with an updated pilot design that adds a performance payment option for customers who agree to share a portion of their battery capacity; and
- This updated pilot design is intended to provide opportunities for DDSR aggregation and inform DDSR tariff design.



APS launched the Residential Energy Storage Pilot on October 4, 2021. The program offers up to a \$2,500 incentive for residential customers who install battery storage systems and connect to the APS Rewards Operating Platform to share battery performance data, and an additional \$1,250 upfront incentive for customers who agree to share a portion of their battery capacity to serve grid needs.

This option responds directly to stakeholder requests for a near-term and simple program option that provides compensation to customers for the value provided from the capacity of their energy storage systems. It will also provide valuable data on DDSR technology performance to help inform the DDSR Aggregation Tariff.

Summary and Next Steps

In accordance with Decision Nos. 77762, 77855, and 78165, APS is working closely with stakeholders and interested parties to complete the DDSR RFP and develop a DDSR Aggregation Tariff to be filed by May 1, 2022.

APS looks forward to working closely with stakeholders, Lawrence Berkeley National Laboratory (LBNL) and the Commission to continue developing and designing a DDSR Aggregation Tariff that encourages innovative approaches for serving grid needs and providing customer value. While this is being developed, APS intends to proceed with initiatives as described in this report that gather and respond to stakeholder input and help inform the path forward for the tariff, including:

- Continue to hold regular stakeholder meetings throughout the tariff design process to provide updates on program activity, answer questions and receive input. APS will continue to file stakeholder meeting summaries to this docket;
- Collaborate with LBNL to help provide data and coordinate with its tariff analysis work on behalf of the ACC; and
- Provide regular updates to the ACC on progress toward valuing the six defined operating characteristics and filing a tariff.

Upcoming activities and milestones include:

- Complete RFP selection process by November 30, 2021;
- Reconvene stakeholder meetings in December after the RFP blackout period ends;
- Work to finalize contracts with vendors for selected projects in the all-DDSR RFP by March 1, 2022; and
- File DDSR Aggregation Tariff by May 1, 2022.